

SECTOR 2

THE BAHAMAS—WESTERN PART

Plan.—This sector describes the western part of the Bahamas and the several seamount plateaux in their continuation to the SE. The description is from Matanilla Shoal in the NW up to Crooked Island Passage in the SE.

General Remarks

2.1 The **Bahamas** (24°15'N., 76°00'W.) are a major portion of an archipelago of Atlantic Ocean above and below-water features; it is NE of Cuba and extends from Florida to Hispanola. Geographically, the islands extend about 575 miles from Matanilla Shoal, in the NW, to Turks Islands, in the SE, and continue to the W so far as to include Cay Sal Bank.

Geologically, they are continued from Turks Islands by a series of three seamount plateaux for a distance of about 155 miles SE to Navidad Bank. Politically, they are divided into an independent Commonwealth of the Bahamas and a dependent British Colony comprising Caicos and Turks islands.

The Bahamas are formed from calcareous matter derived from shells and coral and supported on extensive limestone plateaux physiologically related to Florida.

They have a total land area of about 5,386 square miles, distributed over some 700 islands and 2,000 cays and rocks which are grouped in large measure on Little and Great Bahama Banks. Only a very small number of islands are inhabited.

The islands of the Commonwealth of the Bahamas extend from Little Bahama Bank, in the N, to Great Inagua Island, in the S, and commonly share in a low to hilly terrain substantially covered by vegetation.

New Providence Island is central to the island group and most important as the site of the capital of the Commonwealth, Nassau. Freeport, on Grand Bahama Island, along with Nassau, front on the only deep-water harbors available in the Bahamas.

The Caicos and Turks Islands are low-lying for the most part and comparatively barren.

A number of deep-water passages transit the Bahamas and their extension SE. The passages are open and largely unencumbered seaways available to vessels proceeding between the Atlantic and the waters of the Gulf of Mexico and the Caribbean Sea. Pilotage is not required in these passages and nowhere compulsory except for a few designated areas within the Commonwealth of the Bahamas.

Winds—Weather.—The Bahamas, situated on either side of 25°N, lie within the area of direct NE trade winds influence. Since the N limit of the trade winds belt fluctuates seasonally between 25° and 30° N, the islands are effectively divided into a NW and SE grouping. The NW group of islands has E to SE winds in summer and NE and E winds in winter. "Northers" of diminished strength penetrate the area during the latter period.

The high temperature averages 33°C in July and August, and the low seldom is below 13°C in January and February. September is the wettest month, and December, January and March are the driest.

Fog is rare and visibility is poor on the average of less than 4 days a year.

The SE group has E winds in spring and summer and NE winds in autumn and winter. The average high temperature reaches 33°C in August and September and the low seldom falls below 18°C in January and February.

November is the wettest month, March is the driest. Fog is a rare occurrence.

Pilotage.—Pilotage is compulsory for non-exempt vessels at Freeport, Nassau, Douglas Road, Hanover Sound, Salt Cay Anchorage, and at South West Bay at New Providence Island, at Hatchet Bay at Eleuthera Island, and at Ragged Island where necessity allows entry without a pilot.

Pilots for the anchorages in the vicinity of New Providence Island may be obtained off the bar at Nassau, but vessels proceeding to South West Bay may make arrangements to board the pilot at Goulding Cay.

Caution.—Caution is recommended when navigating within and around the Bahamas.

The Bahamas abound in shoal water of a remarkable transparency which allows an experienced lookout aloft to assist in navigation by observing the subtle shift in water color over various types of sunken dangers and sea floor compositions. Mariners are cautioned in this regard to have the sun well overhead or astern, and to realize that passing clouds can cast a shadow that might very well conceal a sunken danger.

Passages Through the Bahamas

2.2 Deep-water passages through and around the Bahamas number more than a half dozen and, without exception, present no major difficulty to full-powered vessels. The significance of the individual passages is largely determined by destinations outside the Bahamas, such as the Straits of Florida and Windward Passage to the W and S, and the ports of the Mediterranean, North Europe and the E coast of the United States to the ENE, NE and N.

The principal passages are Northwest Providence Channel, Northeast Providence Channel, Old Bahama Channel, Crooked Island Passage, and Turks Island Passage. The secondary passages are Mayaguana Passage, Caicos Passage, Mouchoir and Silver Bank passages, as well as the passages between Silver Bank and Navidad Bank.

Northwest Providence Channel and Northeast Providence Channel lead between Little and Great Bahama Banks.

Tides—Currents.—In the Atlantic approaches to Northeast Providence Channel, currents generally set NW, with rates up to 1.5 knots. In the Florida Strait approaches, the full set of the Gulf Stream requires compensation.

Within the channels, the currents are variable and usually weak. The main sets are NW and N, but occasionally NE in Northwest Providence Channel from February to April.

Directions.—From the E, vessels normally make for Hole in the Wall, the remarkable feature associated with the S point of Great Abaco Island, and marked by Abaco Light.

Sail as safe navigation permits to a position about 8 miles S of Abaco Light, thence steer to pass about 6.5 miles N of Great Stirrup Cay, and 7 miles N of Great Isaac Light.

From Florida Strait, make for a position 12 miles NW of Great Isaac Light, and follow the above in reverse order.

Old Bahama Channel, a deep and comparatively narrow passage leading between the SW side of the Bahama Bank and the NE side of Cuba, is a convenient waterway for vessels transiting between the United States Gulf Ports and Puerto Rico.

See paragraph 4.24 for a description of Old Bahama Channel and the IMO-adopted Traffic Separation Scheme associated with it.

Other passages through the Bahamas will be described according to geographical location.

Caution.—The Bahamas have extensive areas of shoal conceded by some to be among the finest in the Western Hemisphere for the cruising of small boats, yachts, and other pleasure craft. Little and Great Bahama Banks are particularly favored.

While these areas are appropriately described in their geographic sequence within the text, no detailed route descriptions for their transit are given.

Little Bahama Bank

2.3 Little Bahama Bank (26°55'N., 78°40'W.), the more N and smaller of the two major shoal water banks that support the bulk of the Bahamas, has its W side about 47 miles to the E of the U.S. mainland and its S side separated from Great Bahama Bank, to the S, by the deep seaways of Northwest Providence Channel and Northeast Providence Channel.

It comprises a large area of shoal water both inaccessible and dangerous to ocean shipping and includes Grand Bahama Island, Great Abaco Island, and Little Abaco Island as well as a multitude of lesser islets and cays of interest primarily to the yachting community.

Matanilla Shoal (27°21'N., 79°04'W.), the northwestern-most sunken danger on Little Bahama Bank, has a least charted depth of 3.5m over a bottom of singularly level rock covered by dark weeds. It is extremely dangerous in that it is isolated and near much frequented ocean routes, does not produce a distinctive discoloration in overlying water, and gives no indication of its presence by a breaking sea.

Little Bahama Bank W side, between Matanilla Shoal and Grand Bahama Island, is steep-to and gives little warning to vessels making their approach from the offing.

Currents setting through the Straits of Florida strike it obliquely, particularly at White Sand Ridge which, lying sunken about 10 miles SSW from Matanilla Shoal but well visible from aloft, experiences an oblique current of 2 to 3 knots.

Memory Rock, marked by a navigation light about 17 miles farther S, is dark and barren and subject to the damaging effects of heavy seas. Vessels have grounded in the vicinity of this light.

A United States missile test area extends from the coast, N of latitude 27°N, within which missiles may impact.

Vessels transiting the area are warned by maneuvering U.S. aircraft prior to test initiation.

Grand Bahama Island (26°38'N., 78°25'W.), the principal land on the SW side of Little Bahama Bank and the fourth largest island of the Bahama archipelago, is generally quite low throughout, swampy in places, and largely covered by dense forests of pine trees. The bank of the N side, for its entire length, is an imperfectly surveyed, more or less continuous, series of mangrove swashes available only to small craft with local knowledge.

The area seaward of the S side rises steep-to and everywhere is fronted by a narrow margin of sunken dangers, except for the E third of the island where the near-shore area is lacking in detail. The W half of the island is considerably more populated than the E.

From Memory Rock to Settlement Point, several small cays are visible. Indian Cay, close aboard the NW extremity of Grand Bahama Island shows a light. It has been reported that there is no safe opening in the reef S of Memory Rock for vessels with a draft of more than 3.6m.

West End (26°41'N., 78°58'W.), a small community serving as the focus for a considerable tourist activity, is close E of West End Point (Settlement Point), the low rocky promontory at the W extremity of the island. Freeport Harbour, a deep-water port described below, is about 16 miles to the SE.

Several elaborate small craft marinas indent the coast between Freeport and Bell Channel, about 7 miles to the E, while elsewhere as far as the E extremity of the island, the coast is largely without any particularly distinctive land features.

Caution.—Vessels should remain at least 4 miles offshore between West End Point and Freeport due to shoaling.

Freeport Harbour (26°31'N., 78°47'W.)

World Port Index No. 9985

2.4 Freeport Harbour, one of the two major deep-water ports in the Bahamas, is a fast developing resort area and bunkering port. The facility consists of an open roadstead fronting an inner harbor. A large petroleum refinery, fronted by two offshore berthing platforms, lies just SE of the harbor entrance.

Winds—Weather.—See paragraph 1.1.

Tides—Currents.—Mean High Water Neaps rise 1.1m, while MLWS rise 0.1m.

With frequent SE winds there is a strong onshore set between Gordon Cay and Pinder Point. Tidal currents in the approach to Freeport Harbour are weak, variable, and influenced by the prevailing wind.

Under exceptional circumstances, the current may reach a rate of 1.5 knots, parallel to the coast. An occasional, strong NW set has been reported close to the harbor entrance.

It has also been reported that a SW set may be experienced within the harbor basin, out of the Hawksbill Creek and across the W end of Basin 2.

Depths—Limitations.—The coast of Grand Bahama Island is fronted by reefs which extend several miles offshore.

Due to shoaling, vessels should remain at least 4 miles offshore between West End Point and Freeport.

A restricted area, 1 mile in radius, lies centered on the E end of No. 2 jetty (BORCO Terminal). Additionally, an area 2 miles in radius, centered on the same point has been established. The area between the two circles is a precautionary area.

Vessels should remain clear of the oil terminal and should not pass between the berths and the shore. No other vessels should enter the precautionary, or restricted area unless authorized to do so.

The channel to the harbor, which has a controlling depth of 14.3m, is 487m long and 152m wide. Freeport Harbour entrance channel is buoyed and marked by a set of range lights in alignment bearing 021.75°. Within the harbor, the channel opens into a turning basin, about 0.3 mile wide in an E to W direction, and about 0.3 mile wide in a N to S direction. The turning basin has depths of 14.3m. Vessels having a maximum draft of 13m may be safely maneuvered.

The Bahamas Oil Refining Company (BORCO) operates two offshore jetties. The longer one, 975m, has a depth of 28m on the seaward side and 19.8m on the shore side, and the inner one is 640m long with a berth depth of 16.7m, capable of berthing tankers up to 550,000 dwt.

Terminal berths have the following characteristics:

Berth	Length	Depth	Remarks
Basin 1			
1	213m	9.7m	Cruise vessels
2	106m	9.7m	Cruise vessels
3	183m	9.7m	Cruise vessels
Main Wharf			
4/5	320m	9.1m	Cruise vessels
Basin 2			
6, 7, and 8	366m	9.7m	Cruise vessels
9		15m	Containers
10		5m	Container and general cargo
11	305m	9.7m	
Basin 4			
12	274m	9.7m	Wet docking
13	106m	9.7m	Liquefied gas
14	274m	9.7m	Wet docking

The drafts on all berths, except Berth No. 6 and Berth No. 10, are limited by the depths over submarine pipelines, Berth No. 13 is operated by Shell Bahamas Company.

There are four offshore loading berths situated 760 to 1,100m from **Pinder Point** (26°30'N., 78°46'W.). Each platform can accommodate two tankers from 16,000 to 500,000 dwt.

Dock 1 has a length of 91.5m and can accommodate vessels up to 18,000 dwt, with a maximum draft of 8.2m.

A new container terminal, with 550m of berthing space and a depth of 16.6m alongside, is located in the NE part of the harbor.

Construction in the harbor is extending the harbor to the NE.

Aspect.—The entrance to Freeport Harbour can be identified well offshore by the refinery near Pinder Point. Freeport Light is a white tower with black bands, shown just NW of Pinder Point.

A radio tower showing obstruction lights stands close E of the harbor entrance. Within a 1 mile radius of Pinder Point lie numerous tanks, flare structures, and chimneys painted red and white in bands.

A row of cement silos, showing red obstruction lights, stands at the NW end of the harbor.

Several conspicuous water tanks are visible and are best seen on the chart.

Pilotage.—Pilotage is compulsory for passenger vessels of 200 grt and larger and for other vessels of 400 grt and over.

Pilotage for vessels arriving at BORCO should send ETA and draft 7 days in advance (VLCCs only), 72, 48, and 24 hours in advance through BORCO Marine. Vessels should contact the terminal at least 2 hours in advance.

Vessels using Freeport should send their request for pilot at least 2 hours before arrival, 1 hour prior to departure, and 2 hours prior to shifts. Establish VHF contact when within range to amend or confirm the ETA. The pilot boards about 1 mile SE of Freeport Light.

A continuous watch is maintained by Freeport Harbour control tower, call sign "Brazos Pilots," on VHF channel 14.

Anchorage.—Anchorage is prohibited in the restricted area described above. Vessels may anchor about 1 mile W of the harbor entrance in depths of 20 to 27m. The seabed of sand and lime stone rock provides good holding ground.

Vessels are urged to contact the local authorities and the pilot for anchorage information. Vessels should be prepared to vacate the area at short notice if the wind sets in from between SE and W.

Directions.—Due to shoaling, vessels should remain at least 4 miles offshore until permission to proceed is granted. Tankers waiting to berth normally remain about 5 miles offshore.

During daylight, vessels remain at least 4 miles offshore until SSW of the harbor entrance; vessels then proceed on the entrance range, or approach the oil berths on NNE course. At night, vessels should keep well within the white sector of Freeport Light.

Freeport Harbour should preferably be entered in daylight, but the oil berths are usable at any time.

The coast from Pinder Point to **Sweetings Cay** (26°35'N., 77°54'W.) is lined with several small craft harbors. Several conspicuous landmarks are visible, some of which are lighted.

Caution.—With SE winds, there is a landward set between Sweetings Cay and Gorda Point. The bight is dangerous with SW winds.

2.5 Great Abaco Island (26°28'N., 77°05'W.), together with its fingerlike extension Little Abaco Island, is the principal land area on the E side of Little Bahama Bank and ranks as the second largest island of the Bahama archipelago. It is heavily forested in many areas and mostly low-lying throughout, particularly on the bank of W side.

On the E side, a more or less continuous highland ridge rises to a height of about 30m for a distance of about 42 miles, between the S extremity of the island and Marsh Harbour, the administrative center for and the largest community on the island.

Southwest Point, the S extremity of Great Abaco Island, and Hole in the Wall, a natural arch in a low, flat, and rocky finger

of land about 2 miles ENE, are on either side of a narrowing peninsula which, having an uneven and barren appearance from the offing, rises steep-to except for a shoal water bank of coral and sand extending about 5 miles to the SE.

Abaco Lighthouse, close N of Hole in the Wall, is reported radar conspicuous at 22 miles.

Southwest Point has anchorage close offshore to the W in 18m, sand and seaweed, in a position with Abaco Light bearing 075°, distant 3 miles. Hole in the Wall has anchorage for small vessels with local knowledge in 7.3m, in position with Abaco Light bearing 000° and the extremity of the Hole in the Wall finger of land bearing 078°.

Riding Point Terminal (26°36'N., 78°13'W.)

World Port Index No. 9987

2.6 Riding Point Oil Terminal (South Riding Point Oil Terminal) is situated about 30 miles E of Freeport Harbour and consists of a sea island structure about 0.5 mile offshore, as well as a dredged basin for smaller vessels.

Winds—Weather.—The prevailing winds are from the SE. During the winter months, numerous cold fronts transit the area producing a predictable veering of the wind to the SW, then N with the passage of the front. A strong frontal system may raise a swell up to 3m, but these quickly subside following the passage of the front.

Tides—Currents.—The average LW is reported to be 0.5m below datum, while the average HW has been reported to rise 0.8 to 1.5m. Currents in the vicinity of the sea island have been reported to seldom exceed 1 knot, and to run predominantly E and W.

Depths—Limitations.—The Sea Island is fitted with a doppler sonar docking system. The system uses a variety of displays to indicate distance off the berth and speed of approach. Current and meteorological instrumentation are also fitted.

Berth No. 1, the outer berth, is for vessels of 50,000 to 500,000 dwt. The water depth is 30.4m (1994).

Berth No. 2, the inner berth, has a depth of 25.9m (1994), and is for vessels of 35,000 to 50,000 dwt, with a maximum loa of 274m. Both berths have self leveling gangways.

Two inner harbor berths are for vessels not exceeding 205.7m loa and 10.9m loaded draft. A set of range lights, in alignment bearing 340°, marks the dredged channel.

The terminal has been expanded to handle clean and dirty products in addition to crude oil. There are eight large tanks available for products storage.

The largest vessel accommodated was reported to be of 500,000 dwt with a maximum draft of 27.5m.

Aspect.—A conspicuous dish antenna is located in position 26°37.5'N, 78°18.0'W. The buff-colored oil tanks behind the sea island are conspicuous.

Pilotage.—Pilotage for the terminal is compulsory to the Sea Island and inner berths, which is performed by Berthing Masters. Vessels should forward their ETA to the local authorities on leaving the last port of call, and 72, 36, and 24 hours prior to arrival.

Vessels should also establish contact via VHF channel 16 when within 3 miles of the port.

The loading master will board about 2 miles S of the Sea Island, but may meet the vessel at another location specified by the pilot.

Regulations.—Information on terminal regulations should be obtained from the berthing master at or before the transfer conference. Dirty ballast reception facilities are not available; therefore, vessels should arrive with clean ballast. Vessels with non segregated ballast systems discharge the water ashore.

The Sea Island terminal is equipped with a sacrificial anode protection system to guard against galvanic corrosion. Vessels with an impressed voltage cathodic protection system are requested to turn it off while in the vicinity of the terminal.

Signals.—The terminal, call sign "South Riding Point Control," may be contacted on VHF channel 16. It has also been reported that the terminal will respond to the call sign "Burmah Shore Control." The terminal will provide an intrinsically safe VHF set for communications with the shore facility during the cargo transfer operation.

Vessels are also required to fly the Bahamian national flag, and flag Bravo. The terminal fire signal is a continuous sounding of shore sirens.

Anchorage.—Vessels should contact the terminal operators for information on anchorage grounds and instructions. Temporary anchorage is available in the charted area W of the Sea Island, and is marked by East Buoy, Mid Buoy, and West Buoy.

Vessels up to 100,000 dwt anchor between and on a line connecting the buoys, in charted depths of 19.5 to 31m, over a bottom of sand, soft coral, and limestone, with good holding ground. Vessels should be prepared to move on short notice, especially in periods of onshore winds, and should not attempt to anchor E of East Buoy.

Vessels wishing to wait offshore should remain W of Westerly radio mast 26°36.6'N, 78°22.0'W.

2.7 The Abaco Cays, seaward of Great Abaco Island and Little Abaco Island, extend along the E and NE sides of Little Bahama Bank for a distance of about 102 miles between **Lynyard Cay** (26°20'N., 77°00'W.), to the SE and Walkers Cay, to the NW.

They consist of a more or less continuous chain of largely elongated low-lying islets interspersed with a multitude of above and below-water rocks which, for the most part, are situated some 2 to 4 miles within the shoal water areas inside the edge of the bank and are largely inaccessible to ocean shipping.

Elbow Cay (26°32'N., 76°58'W.), the E of the Abaco Cays and one of the first landfalls encountered by vessels making for NE Providence Channel from the NNE, has its N extremity in the form of high, sandy bluff.

Elbow Cay Light, reported radar conspicuous at a distance of 14 miles, stands in the N part of the island and on the W side of a small landlocked shoal water basin.

Hope Town is on the E side of the basin.

Pelican Harbour (26°23'N., 76°59'W.), about 7 miles SSW of Elbow Cay, is one of the few deep water sheltered pools within the Abaco Cays accessible to ocean vessels. A former timber-loading station and currently a nature preserve, the basin is entered from sea through North Bar Channel with the



Elbow Cay Light

aid of two privately maintained white beacons charted in range bearing 290°.

The channel is obstructed by a bar which, having a least charted depth of 4.9m, breaks during strong E winds and becomes particularly hazardous when an E swell is running against an ebb or flood current. It is recommended that vessels enter just before high water slack.

Walker Cay (27°16'N., 78°24'W.), at the NW extremity of Abaco Cays, is a small, scrub-covered, inhabited islet unique in that it is the N islet of the Bahama archipelago. The N part of the archipelago, the above-water Jump Off Rocks, is 1 mile farther NW.

Great Bahama Bank—West Side

2.8 The W side of Great Bahama Bank, between Great Isaac in the N and Cay Santo Domingo, some 320 miles to the SE, describes a more or less regular arc of a circle that bulges to the SW in its approach to the NE coast of Cuba and delimits, where it falls off with comparative abruptness to depths of several hundred meters, a vast area of shoal water largely unnavigable by ocean vessels but open to transit by small craft, particularly in its N and reaches.

Land areas, aside from Andros Island, the W side of which is low-lying, marshy, and without maritime significance, are

small and, with but few exceptions, are clustered to the N in the vicinity of the Bimini Islands. Cay Sal Bank is separate and farther W.

Great Isaac (26°02'N., 79°05'W.), near the NW extremity of Great Bahama Bank, is a small, low lying barren islet surmounted by a lighthouse reported radar conspicuous at 10 miles.

It extends to the ESE for a distance of about 29 miles by a narrowed scattering of above and below-water dangers of which Gingerbread Ground is considered the principal sunken hazard on the N side of Great Bahama Bank.

Tidal currents are strong in the vicinity of this hazard.

Anchorage.—Great Isaac has anchorage, according to wind and sea conditions, either close NNW in 13m or to the SSE in 7.3 to 9.1m. Strong ENE and WSW winds cause the anchorages to become untenable, while at times a fresh S wind blowing during a N swell creates conditions in which landing on either side of the islet is impossible.

Safe anchorage with good holding ground was reported in about 25m between NW and N from Great Isaac, distant 5 miles.

A depth of 16.5m was reported 6.5 miles NNE of Great Isaac.

Several shoals have been reported to lie up to 8.5 miles N of Great Isaac Light.

2.9 Bimini Islands (25°44'N., 79°15'W.) ([World Port Index No. 10000](#)), about 48 miles E of the U.S. mainland, are on the NW edge of Great Bahama Bank and in the N part of a scattering of islets and cays extending some 35 miles between the small black North Rock, in the N, and South Riding Rock, in the S.

They consist of the two low-lying North and South Bimini Islands which are sandy, flat, and wooded, and separated by a shallow and frequently shifting channel that leads to a shoal water harbor area with extensive facilities primarily of interest to the yachting and small boat enthusiast.

Alice Town, a small community near the SW extremity of North Bimini Island, is an administrative center and hub for one of the world's best known big game fishing areas.

North Bimini Island has charted anchorage seaward of its W side. South Bimini Island has anchorage for small vessels with local knowledge in a charted depth of 8.2m in a position with Bimini Island SW extremity bearing 045° and Round Rock (S of South Bimini Island) bearing 169°.

Between South Bimini Island and Ocean Cay, about 17 miles SSE, the several elongated, wooded, and somewhat elevated islets Gun Cay, North Cat Cay, and South Cat Cay provide a number of anchorages and small harbors primarily for the accommodation of pleasure craft with a draft of less than 3.7m. Tidal currents in this area tend to set directly onto and off Great Bahama Bank.

2.10 Ocean Cay (Sandy Cay) (25°25'N., 79°13'W.) is the site of a significant exploration by private effort of extensive submarine deposits of aragonite (a form of limestone) and consists of a largely man-made above-water area some 200 acres in extent.

The approach channel is about 1 mile long and has been dredged to 12m deep. It is marked by six buoys and terminates

at the turning basin. The turning basin is located just S of the channel. Vessels are loaded here and there are reported depths of 7.8 to 10.6m. A set of range lights, in alignment bearing 075°, has been reported to mark the channel.

Vessels approaching Ocean Cay from the N or NW, generally stand well off Great Bahama Bank W side until abeam Gun Cay, then they haul SSE and make for the buoys at the entrance to the channel leading to Ocean Cay berthing facility.

When approaching from the S, they similarly stand well to sea until South Riding Rock can be identified, then they proceed with caution to the channel entrance.

Pilotage.—Pilotage is compulsory and is provided by the company Port Director.

South Riding Rock (25°14'N., 79°10'W.), near the S extremity of the cays and islets extending N and S from Bimini Islands, is low-lying, sparsely covered with brushwood, and marked by a navigation light of significance to vessels proceeding along the NW reaches of the W side of Great Bahama Bank.

Several anchorages are charted to the S, ESE, and E of the light.

South Riding Rock to Cay Santo Domingo

2.11 The W and S sides of Great Bahama Bank, for a distance of about 290 miles between S Riding Rocks and Cay Santo Domingo, drop off from shoal depths to depths well over 200m within the space of a few miles and tend to bulge to the SW such that, in their approach to the NE coast of Cuba, they form one of the confines to the deep and clear, but comparatively narrow Old Bahama Channel. Several islets and sunken dangers lie on or near this plunging edge.

Orange Cay (24°57'N., 79°09'W.), about 17 miles S of South Riding Rock is quite barren, rising about 3.9m above sea level and marked by a mast with an observation platform which, when approaching from the W or S, can be mistaken for the light on South Riding Rock.

A vessel found good anchorage in 14.6m in a position about 1.5 miles W of Orange Cay's S extremity.

Guinchos Cay (22°45'N., 78°07'W.), about 160 miles SSE of South Riding Rock, is a low-lying sparsely scrub-covered islet of sand and bleached dead coral. It has anchorage in about 7.4m in clear area about 1.5 miles to the W.

An offshore platform was under construction about 14 miles WNW of Guinchos Cay.

2.12 Cay Lobos (22°23'N., 77°35'W.), about 110 miles WNW of Cay Santo Domingo, is low-lying, rocky, and marked by a navigation light which, with its lighthouse reported radar conspicuous at a distance of 12 miles, is of significance to vessels in transit of Old Bahama Channel.

The anchorage is in 9.2m in a position with the light bearing 114°, distant 0.5 mile.

Diamond Point, about 20 miles SE of Cay Lobos, is the sunken SW extremity of Mucaras Reef which, marked by dark coral and grass, rises steep-to on the E side of the SE entrance to Old Bahama Channel.

In an emergency, vessels anchor in 9.2 to 11m, sand, anywhere over a bank extending NW from Diamond Point and

Mucaras Reef for a distance of about 10 miles to the nearly awash E extremity of Labanderas Reef.

Diamond Point and Mucaras Reef are considered extremely dangerous to vessels transiting the S reaches of Old Bahama Channel, because each rises steep-to in its deep-water approaches and is sunken in shoal depths in a position largely out of convenient range of all landmarks, with the possible exception of Cay Lobos Light.

Cay Santo Domingo (21°43'N., 75°45'W.) is a small low-lying islet, marked by a light, located at the S extremity of Great Bahama Bank as well as at the extremity of an underwater peninsula which everywhere along its flanking periphery rises steep-to from the depths, particularly to the S.

Several sunken and nearly awash dangers are charted between Cay Santo Domingo and Diamond Point, about 90 miles WNW.

2.13 Cay Sal Bank (23°50'N., 80°05'W.) is an isolated and comparatively extensive shoal water area in a somewhat central position with Santaren Channel separating it from Great Bahama Bank W side, with Nicholas Channel setting it apart from the NE coast of Cuba, and with the Straits of Florida dividing it from the U.S. mainland and the Florida Keys.

It is roughly in the form of a triangle and has a number of above-water land areas scattered along its edges, save along its S or Nicholas Channel side, where a cursory examination has reported the existence of numerous rocky heads.

Tides—Currents.—The height of the tide and direction of current are influenced greatly by the wind. In general, the tidal current sets onto the bank from all directions on the flood tide, and off on the ebb. Near Double Headed Shot Cays, the tidal currents are rotary.

In Santaren Channel, a current of moderate or low constancy flows NW at about 0.7 knot, joining the Florida Current at the channel's NW end.

In Nicolas Channel, a weak current generally sets W or NW, but an E or SE current may encroach into the channel's W end.

Cay Sal (23°42'N., 80°25'W.), in the SW part of Cay Sal Bank and the only inhabited land area, is about 1 mile long. It consists of an approximately circular, low-lying islet which, rising to a narrow range of sand hills on its NE side, has in its interior portions a large salt pond commonly replenished by heavy wind-driven seas that broach the islet along its SW side.

It is covered with stunted palm trees and marked by several buildings standing on its W side. Anchorage is available in 12.8m, sand, in a position charted close W of the islet where the play of tidal and ocean currents can be considerable. It was observed that the current sets generally SE through the anchorage at a velocity of up to 2 knots.

Double Headed Shot Cays extend as a group of elongated islets from South Elbow Cay in the SW, to Water Cays in the NE, and are in a position on the NW side of Cay Sal Bank where the Florida Current, in its course E and N through the Straits of Florida, usually sets close offshore at full strength. North Elbow Cay, the highest of the islets, is marked by a disused conical stone lighthouse, 17.7m high.

Vessels, with the wind from WSW through N to NE, anchor in 9.2 to 11m in a position SE of Elbow Cay, with the disused lighthouse bearing between 315° and 338°.

With the wind from E thru S to SW, they anchor in similar depths, sand, in a position close NW of the islet, with the disused lighthouse bearing about 137°.

Anguilla Cays, near the SE extremity of Cal Say Bank, consist of several elongated, scrub-covered, sandy islands which, swampy near their S end, are marked here and there by stunted palm trees.

The N end of Anguilla Cays is marked by a beacon, 5m high. The islands are reported radar conspicuous at 12 miles.

A heavy surf breaks along the NE side of the islands and the channels through them are reported to be narrow and shallow.

The anchorage to the SW is reported to be good, with depths of 11 or 12.8m.

Great Bahama Bank—Central Part

2.14 The central part of Great Bahama Bank comprises the area in and about Tongue of the Ocean and includes the Berry Islands, Andros Island E side, and the islands and islets (including New Providence Island) ranged along the SE side of Northeast Providence Channel.

Tongue of the Ocean (24°00'N., 77°20'W.), sometimes abbreviated TOTO, is a remarkable submarine canyon leading in from the open sea by way of Northeast Providence Channel, forms a deep, elongated cul-de-sac having comparatively steep-to sides and an exceptionally flat bottom over the greater part of its length.

The bulk of the water mass within the canyon shares largely in the multiple characteristics of the oceanic water outside in the Atlantic, with the notable exceptions of a singular transparency and a generally sluggish circulation.

Because of its location, configuration, depth, water properties, and stable conditions, Tongue of the Ocean may be characterized as a small model ocean having many of the advantages of the larger bodies of water with few of their disadvantages.

2.15 Berry Islands (25°35'N., 77°45'W.), on the W side of NE Providence Channel and N of the seaward entrance to Tongue of the Ocean, consist of 30 larger islands and a number of lesser islets lying scattered along Great Bahama Bank N side in the form of an open loop extending from the low and quite rocky Little Stirrup Cay in the N, to Blackwood Bush, charted as two small cays about 21 miles SSW. The islands are wooded, comparatively low-lying, and of primary interest to ocean shipping only when in transit of Northwest and Northeast Providence channels.

Tidal currents run strongly and set directly in and out of the openings between the islands.

Great Stirrup Cay, the northernmost of the Berry Islands, is marked by a navigation light with the lighthouse reported radar conspicuous at a distance of 16 miles, and by a United States tracking station radio tower which, rising to a height of 61m close WNW of the navigation light, is reported visible at a distance of 18 miles.

Vessels anchor in moderate weather and during prevailing E winds in about 12.8m, white sand, in a position with the navigation light bearing 137°, distant about 1.3 miles.

Great Harbour Cay, the largest of the Berry Islands, lies fronted to the E by a small grouping of islets and several off-lying sunken dangers which require caution in their approach.

Bullocks Harbor, a modest community and local fishing center, is on the W side of the island and adjacent to an elaborate marina and resort complex which is reported to be of interest primarily to the small boat and yachting enthusiast.

Small craft make their approach to Bullocks Harbor and the neighboring marina from the N, commonly by way of Great Harbour.

Between Great Harbour Cay and Chub Cay, about 20 miles to the S, the Berry Islands continue in a more or less uninterrupted series of smaller islands of which a number are privately owned.

Little Harbour Cay, about one-third of the way along the arc, is somewhat higher than neighboring islands and thickly covered with vegetation and coconut palms. The Cay also shows a light. The island is sparsely inhabited and has a well-sheltered small craft basin on its W side, reported one of the finest in the Berry Islands.

2.16 Crab Cay (Thompsons Cay) (25°25'N., 77°54'W.) forms with Frazers Hog Cay, the largest island complex in the S part of the Berry Islands, and one of the principal landfalls for small craft in their transit of Great Bahama Bank between Tongue of the Ocean and the Bimini Islands.

Chub Cay (25°24'N., 77°54'W.) is a Port of Entry. The marina entrance channel has a depth of 2.1m. Leading lights in line, bearing 035°, lead into the channel.

A distinctive 61m water tower stands on Chub Cay, where it is reported to be visible at about 15 miles.

An open roadstead between Frazers Hog Cay and Bird Cay, an extensively developed and privately-owned islet close SE, has good anchorage sheltered from NE gale winds in 7.3m, sand and coral, in a position about 1 mile W of Bird Cay W extremity.

It is recommended that vessels making their approach from the W pass seaward of the above-water rocks lying about 2.5 miles W of Bird Cay.

Between the Berry Islands and Andros Island, Tongue of the Ocean forms a bight extending about 17 miles N to S.

Caution.—Several submarine cable areas exist off Andros Island, and may best be seen on the chart.

2.17 Andros Island (24°40'N., 78°00'W.), the largest of the Bahamas, is along much of the W side of Tongue of the Ocean, where it is fronted by a more or less continuous barrier reef which falls away steeply on its offshore side and largely blocks free access to an intervening and much encumbered shoal water margin on its onshore side.

The island is low-lying, extensively covered by forests of pine and hard woods (e.g. mahogany, *lignum vitae*), and inhabited primarily along its E coast. Its central portion is drowned in swamps and under a network of very shallow waterways, of which some may be followed from one coast to the other by small boats with adequate local knowledge.

Morgans Bluff (25°10'N., 78°02'W.) is a remarkable rocky headland which shows a light. A harbor was under development S of the bluff.

Nicolls Town (25°08'N., 78°00'W.), near the NE extremity of Andros Island, is a small community and the administration center for both the Andros Island and the Berry Islands. Range lights in line, bearing 223.75°, lead through the reef at Bethel Channel.

Mastic Point, a modest settlement close SSE, is the site of a small, privately owned commercial basin for the use of small craft calling in support of timber and farming activities under development nearby.

Andros Town (24°43'N., 77°47'W.) is at the entrance to the somewhat extensive Fresh Creek and within an area under development for the tourist trade. Atlantic Undersea Test and Evaluation Center (AUTECH) Andros Island, has its base station about 1.5 miles to the SE. The area is restricted. A number of lights are also shown within the area.

2.18 Salvador Point (24°30'N., 77°43'W.), about 14 miles SSE of Andros Town, and the SE extremity of Big Wood Cay, about 10 miles farther SSE, are sites of two AUTECH auxiliary stations. Submarine cables extend from the stations. Each is fronted by a turning basin and approach channel dredged to the accommodation of small boats only. Bristol Galley, is an above-water rock about 2.5 miles NNE of Salvador Point.

Mangrove Cay (24°15'N., 77°39'W.), the administrative center for Andros Island, is a small settlement lying close W of the NE entrance to South Bight, the S of the waterways leading through the middle portion of the island.

Golding Cay, in the entrance to South Bight, is the site of a conspicuous AUTECH auxiliary station, fronted by submarine cables, best seen on the chart.

Bastian Point (Victoria Point), the N entrance point of South Bight, has fair anchorage in 22m, in a position with Golding Cay W side bearing 169° and Flat Rock bearing about 222°.

2.19 Kemps Bay (24°03'N., 77°33'W.), a small community about 10 miles SSE of South Bight, is the administrative center for the S part of Andros Island.

Deep Creek, about 4 miles to the SSE, and High Point Cay, an off-lying islet about 6 miles farther SSE, are sites of two AUTECH auxiliary stations. Each is fronted by a turning basin and approach channel dredged to accommodate small boats only. A cable area fronts the station.

Tongue of the Ocean's S part has the form of a submerged amphitheater with its W edge largely defined by an elongated scattering of islets extending from Andros Island.

The E side of its entrance is marked by the heavily wooded islet Green Cay, while its S rim is serrated by a series of ridges which form the limits of many channels leading onto the S reaches of Great Bahama Bank.

The channels are navigable by small vessels with local knowledge, but tidal currents are of such strength that navigation is not recommended at night.

Tongue of the Ocean has many testing and cable areas as well as a 2 mile wide surface transit lane.

The SE side of Northeast Providence Channel extends in a gentle arc for a distance of about 56 miles between Bridge Point, the N extremity of Eleuthera Island, and Clifton Point, the W extremity of New Providence Island and the E entrance point of Tongue of the Ocean.

A more or less continuous chain of lesser islands and islets lie between Eleuthera and New Providence Island.

Several navigable channels transit this chain and lead into an extensive and comparatively deep lagoon lying just within Great Bahama Bank.

2.20 Egg Reef is the dangerous, sunken N edge of a somewhat broad, shoal water coastal bank extending N and E from Eleuthera Island. Several elongated, rounded, and rather wooded islets are just S of the reef and extend from Saint George's Cay, in the E, for a distance of about 8 miles to Egg Island, in the W. A light is displayed from Egg Island.

Pierre Rock, 8m high and an excellent radar target at 16 miles, is about 0.5 mile N of the NW end of Saint George's Cay.

Spanish Wells, a small community near the E extremity of Saint George's Cay, is reached by a small boat channel passing either S and thence ENE of Egg Island, or S through the winding fairway leading between Saint George's Cay and Eleuthera Island.

Egg Island has anchorage in 14.6m, poor holding ground, in a position with Egg Island light bearing 025°, distant about 1 mile. A heavy swell usually sets into the anchorage.

Caution.—Less water than charted has been reported in the vicinity of Egg Island.

2.21 Fleeming Channel (Six Shilling Channel) (25°16'N., 76°56'W.), about 21 miles SW of Eleuthera Island's N extremity, is a comparatively deep-water passage which, entered between the rounded Six Shilling Cays and Six Shilling Channel Light, about 2 miles SW, leads in from Northeast Providence Channel. There is a least depth of 8.2m in the fairway of the entrance, with lesser depths in the near vicinity. Tidal currents set across the inner reaches of the channel at a rate of 1 to 2 knots.

Caution.—Vessels are advised that the channel is dangerous. Transit is recommended during the middle of the day when the tide is rising, winds are light, and the weather forecast is favorable. A wreck, partially above-water, lies about 0.3 mile N of Six Shilling Channel Light.

2.22 Douglas Channel (25°09'N., 77°06'W.), the principal access to Shoe Hole Road and Douglas Road (Cochrane Anchorage) from Northeast Providence Channel, is entered about 12 miles ENE of New Providence Island's E extremity through an intricate and much encumbered passage leading between Booby Island (Booby Cay), to the NE, and Rose Island, to the SW; two beacons are located at the E end of a reef extending from the E end of Rose Island. They also mark the W side of Douglas Channel.

Temporary anchorage is available as charted in the seaward approach to the channel. Pilotage is compulsory, with the pilot boarding off the entrance to Nassau Harbour, New Providence Island.

Shoe Hole Road, a somewhat encumbered basin immediately inside the entrance to Douglas Channel, has anchorage in 7.4 to 9.2m over a holding ground of poor quality. During strong N winds, vessels are advised to exercise caution for dragging anchor.

Douglas Road (Cochrane Anchorage), a seldom used basin to the S and W of Douglas Channel, has convenient anchorage in its W part, in a charted position with Potter Cay (in Nassau Harbour) bearing 285° and almost in range with Fort Montague, East End Point Light bearing 253°, and Porgee Rocks Light bearing 291°.

2.23 New Providence Island (25°02'N., 77°24'W.), on the E side of the conjunction of Northeast Providence Channel with Tongue of the Ocean, is one of the smaller of the Bahama Islands, having a surface area of only 58 square miles, but is far and away the most important in that it is inhabited by well over one-half of the entire population of all the islands and is the site of the Commonwealth capital, Nassau.

The island is extensively forested with pine scrub and largely low-lying throughout, particularly along the S side where the coast becomes swampy and fronted by shoal water flats extending well onto Great Bahama Bank.

An almost uninterrupted ridge of forested hills rises just inland of the N coast. The N side of the island is fronted by a shoal water coastal margin which, extending for the most part about 1.5 miles offshore, constitutes a foundation for several off-lying, scrub-covered, elongated, low-lying islets in its E portion and an almost unbroken chain of sunken and awash dangers in its middle and W portions.

Hanover Sound (25°05'N., 77°16'W.), about 3 miles N of New Providence Island E extremity, is a comparatively deep-water break in the coastal margin entered between Salt Cay and a sunken spit advancing NW from Rose Island Rocks.

A conspicuous tower standing near Salt Cay E extremity serves as a landmark for the entrance. Vessels make their approach from NE Providence Channel and, steering for the quarantine house on Athol Island, proceed so as to pass NW of the Chub Rock Light.

Pilotage is compulsory.

Vessels enter and anchor in 7 to 7.3m, sand and grass, in a position with Rose Island Rocks bearing 045° and Salt Cay extremity bearing 341°. The anchorage is good during prevailing weather conditions, but subject to a moderate surge during adverse conditions from the N.

Elsewhere along New Providence Island N side, with the exception of Nassau Harbour described below, anchorages on the coastal margin are available only to small boats able to negotiate intricate shoal water passages leading through a multitude of sunken dangers.

Clifton Bluff, about 1.5 mile SE of Goulding Cay at the W extremity of New Providence Island, rises in the vicinity of a mile-long line of white cliffs which, falling away precipitously into the sea, are the only place along the entire coast of the island where depths of over 200m are found less than 0.2 mile offshore.

Clifton Pier, about 0.5 mile farther ESE, has depths of 3.7m alongside and facilities for the landing of passengers from cruise ships which, unable to enter Nassau Harbour because of adverse weather conditions, proceed to Clifton Bluff for shelter.

Clifton Pier (25°00'N., 77°33'W.) ([World Port Index No. 9995](#)), an oil import terminal about 1.7 miles SE of Goulding Cay at New Providence Island's W extremity, consists of submarine pipeline leading offshore to a central platform

flanked by dolphins which form a berth aligned NW to SE in a depth of 12.2m. It was reported that the berth would accept vessels with maximum draft of 11m.

Pilotage.—Pilotage is compulsory for vessels calling at the Clifton Bluff area. Pilots board off Clifton Pier; not less than 24 hours advance notice is required.

Anchorage.—Vessels anchor as charted SE of the offshore oil terminal, in 14m sand, good holding ground. The front range beacon of the 076° range was reported to be destroyed. A stack lies about 0.5 mile N of the beacons.

Anchorage is also available farther SE in 9.2m, in a position within South West Bay with Clifton Bluff bearing about 322°, distant 1.5 miles.

Nassau (25°05'N., 77°21'W.)

[World Port Index No. 9990](#)

2.24 Nassau is one of the major deep-water ports of the Bahamas and port of call for cruise ships. It is the capital of the Bahamas and the pivotal point of all traffic and commerce in the islands. Nassau Harbour lies on the N side of New Providence Island, bounded N by Silver Cay, Paradise Island, and Athol Island; E by a line forming the E extremities of Athol and New Providence Islands; and W by a line extending S from the W end of Silver Cay to New Providence Island.

This natural harbor has been deepened in its W part through dredging and improved in its principal or W entrance by the construction of sheltering breakwaters.

The harbor entrance channel between Paradise Island light and Silver Cay west breakwater is well buoyed and straight forward and most of the largest passenger vessels are able to enter and berth alongside.

Nassau is an important center for cruise vessels and has eleven berths for this purpose, including those extending from the finger pier which has dock space for four cruise liners. In bad weather, cruise ships proceed to the SW anchorage at Clifton Pier.

Winds—Weather.—The Nassau Marine Operator broadcasts on VHF channel 27 the latest weather information every even hour, and on request. Vessels unable to enter the harbor proceed to Clifton Pier.

Tides—Currents.—Mean High Water Springs rise 1.3m, while MHWN rise 1.2m.

Tidal currents run E on the flood, W on the ebb, and usually flow at rates of about 1 knot, but may run at a greater strength at times.

During the flood current, it has been reported that a strong W set exists outside the harbor but an E set exists inside the basin. This has been attributed to the ocean currents drawing water out of the basin and around the E end of Paradise Island.

Depths—Limitations.—The entrance channel, entered between the breakwaters, is dredged to a depth of 11.6m. A side channel to Arawak Cay is dredged to a depth of 8.2m. A turning basin at the SE terminus to the entrance channel is dredged to depth of 11m, and contains the main cargo and passenger wharves.

Eastern Channel, which runs from the turning basin, past Potter Cay and the yacht facilities, is suitable for vessels with a draft of 3m, but shows greater charted depths.



Nassau Harbor East Breakwater Light

A bridge, with a maximum vertical clearance of 21m, spans the channel from Potter Cay to Paradise Island.

Passenger Pier, with berthing space of 366m, has a dredged depth of 11m alongside.

The flood current sets N off Passenger Pier, and the ebb current sets onto Prince Georges Wharf.

Three culverts passing under the arm connecting Passenger Pier and Prince Georges Wharf allow the tidal current to flow through the basin.

Another passenger pier, capable of accommodating cruise vessels up to 315m long with drafts up to 11m, is situated about 0.2 mile N of Passenger Pier.

Prince Georges Wharf, about 305m long, lies close S of and is connected to Passenger Pier. It has 7.3 to 7.9m on its N side, and 5.8 to 7m on its S side.

Union Wharf, about 0.1 mile E of Prince Georges Wharf, has five berths, including one 95.4m long with a 5.5m draft. The other four are nearly always occupied by local cargo vessels on a permanent allocation basis.

A wharf, 213m long with an alongside depth of 7.3m, lies on the N side of Potter Cay.

Esso Pier, projecting S from Paradise Island, lies about 0.3 mile E of Prince Georges Wharf, and has an alongside depth of 5.5m.

The channel to Arawak Cay has already been described. The wharf is about 0.2 mile in length, with alongside depths of 8.2m.

Pilotage.—Pilotage is compulsory and is available around the clock. Vessels should send ETA at least 48 hours in advance and contact the pilot station 30 minutes prior to arrival. Permission is required to enter port, depart, or move within the harbor. The pilot boards 0.5 to 1.0 mile N of the entrance.

Signals.—When the port is closed due to bad weather, a red flag will be displayed at the W end of Paradise Island by day. During dangerous entry conditions at night the color of the Paradise Island light is changed to red. If sea conditions during the day permit vessel entry but not departure of boats from harbor, a white flag is displayed at the flagstaff on the W end of Paradise Island.

Vessels may anchor in the vicinity of the pilot station where the water depth permits.

Hurricane signals are hoisted at the lighthouse and at Fort Fincastle. In the event that the storm is assessed to affect New Providence Island a second flag, red with yellow stripes, is hoisted below the normal red flag with black square center.

Anchorage.—Anchorage just off Nassau Harbor extends over an area N and E of the W end of Paradise Island, to approximately 0.5 mile offshore where the water depth is too great.

Temporary anchorage for vessels not entering harbor may be obtained in depths of 14m or deeper, about 0.1 mile N of the E breakwater light. This area is usable in S winds. Strong winds

from the N to NE require use of an anchorage near Clifton Bluffs off the SW tip of New Providence Island.

Caution.—Small craft anchorages, mooring cables, submarine pipelines and cables, and sea plane landing areas are located in various areas of the harbor as may best be seen on the chart.

Great Bahama Bank—East Side

2.25 The E side of Great Bahama Bank, between Eleuthera Island N extremity and Cay Santo Domingo some 235 miles to the SSE, is distinctive because of two large deep-water indentations which, sweeping well into the bank from the open sea, are bordered throughout by a more or less continuous chain of elongated islands, islets, and cays.

Exuma Sound, the N indentation, groups Eleuthera Island to the N and the Exumas to the W. Long Island is between the two indentations, while the Ragged Islands and their continuation N front the W side of the S indentation.

Eleuthera, Great Exuma and Long Islands, the largest land forms in the area, are among the most notable of the Bahamas in that they are generally higher and more hilly; their soil also supports significant agriculture and livestock operations.

The lesser islets around Exuma Sound are used by pleasure craft, while those isolated islets around the indentation S of Long Island are mostly without any particular interest.

2.26 Eleuthera Island (25°10'N., 76°14'W.), the N and largest of the islands on the E side of Great Bahama Bank, has its low-lying extreme N portion divided from the rolling hills constituting its major and considerably elongated S portion by Glass Window, a large square notch which, interrupting a precipitous terrain in the narrowest part of the island, is particularly conspicuous from the E and W.

The soil is fertile in several areas and supports agricultural and livestock activity. The E or windward side is largely reef-fringed, while the central portion of the W or leeward side is abrupt and fronted close up by a comparatively deep-water lagoon which may be entered by small vessels with local knowledge from either Northeast Providence Channel or by way of an intricate passage close W of Powell Point, the N extremity of the SW side of the island.

A current, with a strong SE set, may sometimes run close off Eleuthera Island NE side, particularly after N to NW winds, and thus counter to the prevalent NW set of the current farther offshore.

Dunmore Town (25°30'N., 76°38'W.), one of the oldest communities in the Bahamas, is on the W side of Harbour Island, a low-lying partially wooded offshore land area close SE of Eleuthera Island N extremity. A radio mast, marked by an obstruction light, stands in the middle part of Harbour Island.

Small vessels with local knowledge make their approach either from the N, by way of an intricate passage leading close off Eleuthera Island's N extremity, or from the open sea by way of South Bar, the passage of Harbour Island. The least fairway depth is 4.3m; the tidal streams are strong, a swell is always present, and the sea frequently breaks.

Vessels bound for Dunmore Town by way of the passage S of Harbour Island, steer for South Baron on a heading of 214°

and proceed so as to keep to the N side of the fairway. They conveniently anchor in East Harbor, just inside South Bar, in 7.4m in a position with Harbour Island W side bearing 350° and South Bar entrance point bearing 014°.

Hatchet Bay and Governors Harbour are small communities on Eleuthera Island's W side. The former is an outpost for livestock and poultry, while the latter is the administrative center for the island. Levi Island, small and narrow, has its S end about 0.5 mile W of the N entrance point of Governors Harbour.

Miller Anchorage (24°39'N., 76°12'W.), on Eleuthera Island's SW side, has good anchorage in prevailing winds for small vessels in 12.8m. It is recommended that vessels prepare to leave this anchorage should the winds shift to the W.

Patches of 9m, 11m, and 13m lie about 5 miles N of **Eleuthera Point** (24°37'N., 76°09'W.), the S extremity of the island.

2.27 The Exumas (24°00'N., 76°20'W.) are those islands and islets extending in uninterrupted series for a distance of about 130 miles along the entire W side of Exuma Sound between Eleuthera Island in the N and Long Island to the S. They are conveniently divided into a N and S grouping.

Exuma Cays, the N grouping, consist of a multitude of small, sparsely-populated islets which, scattered along the very edge of Great Bahama Bank where it drops off abruptly into Exuma Sound, exhibit a wide variety in size and disparate character ranging from the low-lying barren sand to rolling hills and dense vegetation. Many of the islets are privately owned and all are primarily of interest to yachting and small boat enthusiasts.

Tidal currents are strong in the several passages leading from the sound onto the bank, and anchorages for ocean vessels are severely limited in number, in depth, and in swinging room.

Great Exuma Island and Little Exuma Island, the S grouping, are by far the largest of the Exumas. They are comparatively hilly along the NE or Exuma Sound side and low and swampy on the SW or bank side. The soil is fertile and supports livestock and agriculture activity.

George Town (23°31'N., 75°46'W.), the administrative center for the Exumas, is on Great Exuma Island where it fronts on a largely shoal water basin or lagoon that is formed and somewhat sheltered to the NE by the wooded and off-lying Stocking Island, together with the several islets of its continuation to the NW and SE. Small vessels, with local knowledge and a high tide, may proceed to George Town from the NW by way of West Channel.

Larger vessels, with a draft no deeper than 4.6m, commonly enter from the SE by way of Three-Fathom Channel, and proceed as far as Elizabeth Harbor or the dredged pool charted close NW.

Long Island (23°15'N., 75°06'W.), the E of the islands on the Great Bahama Bank E side, differs from the other islands in the Bahama archipelago because of its rolling hills, bold headlands, and high cliffs. The soil is quite fertile and there is considerable activity in agriculture and livestock.

Cape Santa Maria, the N extremity of Long Island and marked by a light, is a comparatively bold, conspicuous headland extended several miles seaward by sunken dangers which break in heavy weather and remain difficult to detect during calm weather.

It is recommended that vessels keep well seaward and pass at a distance of not less than 5 miles off the cape.

Long Island's E side is bold, and between Cape Santa Maria and Clarence Town (about 43 miles SSE), is particularly inhospitable in that cliffs front on a narrow, rock-strewn coastal margin which, dropping away abruptly to ocean depths, are exposed to the effects of a usually prevailing heavy sea. This stretch of the coast has not been closely examined and should be avoided.

2.28 Clarence Town (23°06'N., 74°58'W.), the administrative center for Long Island, is a small community fronting on shoal water, which is poorly sheltered in general, lies with its entrance open to winter winds, particularly those from the N.

Larger vessels anchor outside the entrance in 18.3m, in a position about one mile N of Harbour Point, the W entrance point of the harbor and clear of the submarine cable.

The harbor can accommodate a few vessels with drafts of not more than 4m with local knowledge; being open to the NNW, it is much exposed during the winter months. A pilot is advised and is available.

Two churches, each with two spires, are prominent; one 0.4 mile SW and the other about 0.5 mile WSW, respectively, from Harbour Point.

South Point, the S extremity of Long Island, is very low and difficult to make out. It is recommended that vessels proceed with caution and identify the conspicuous white cliffs close NE; the 76m high radio mast close N; and Majors Hill, a remarkable, 46m high sharp peak about 5 miles to the N.

Long Island's W side fronts on the shoal waters of Great Bahama Bank and is of interest only to the small boat and yachting enthusiast. The SW side changes to a series of irregular lagoons and salt pans that front on a comparatively broad coastal margin having good anchorage during prevailing E winds.

The best anchorage and the one most convenient to Clarence Town, on the opposite coast, has 12.8 to 14.6m, coral and weed, in a position SW of the small boat facility Galloway Landing, and with Stephenson Rock bearing 303°, distant about 4 miles.

The Ragged Islands, together with a more or less continuous line of islets and cays to the N, form a remarkable, near semi-circular chain of islands extending along the very edge of Great Bahama Bank E side for distance of about 90 miles, from the middle of the side of Long Island generally S to Columbus Bank.

2.29 Jumentos Cays (23°08'N., 75°30'W.) consist of a chain of low-lying narrow islets considered by local authority to be between barren Nuevitas Rock and the distinctive Water Cay, about 22 miles WSW. Pear Cay Pass, entered about midway along the islets between No Bush Cay and Pear Cay, is the entrance to an intricate channel which, available to small craft with local knowledge, leads to Tongue of the Ocean.

Between Jumentos Cays and the Ragged Islands, about 50 miles to the S, several access channels lead onto Great Bahama Bank and thence W to Old Bahama Channel by way of a passage which, available to small vessels with local knowledge, has charted depths of 7.3 to 9.2m.

Man of War Channel, the N and deepest, has a least depth of 7.3m; Nurse Channel, the middle access, has a least charted depth of 5.8m; Raccoon Cut, the southernmost access, is available to vessels with a draft no deeper than 3.6m.

Ragged Island (22°12'N., 75°44'W.) and Little Ragged Island, with a combined surface area of only about 5 square miles, are windswept, largely barren, and alternately hilly and swampy. Duncan Town, the administrative center for these islands under discussion, is on Ragged Island.

Ragged Islands Anchorage (22°09'N., 75°44'W.) is close W of Little Ragged Island. It has good anchorage in depths of 6.1 to 6.7m, sand, in a position clear of two rocky patches, with Little Ragged Island S extremity bearing 097° and Point Wilson on Ragged Island bearing 004°.

2.30 Columbus Bank is between the Ragged Islands and Cay Santo Domingo, the southernmost extension of Great Bahama Bank, and continues E about 30 miles to Cay Verde as a comparatively broad and much encumbered gigantic spit or semi-plateau rising steep-to from ocean depths.

The N side of this bank is free of dangers for a distance of 15 miles E of Little Ragged Island, with depths of not less than 12.8m, except for a 9.1m shoal 6 miles to the SE.

Farther E, there are a number of heads, with depths of less than 5.5m, on the very edge of this bank, but S of these heads, there are depths of not less than 11m, clear white, coral sand. The NE end is encumbered with rocky heads and is very dangerous.

Cay Verde (22°00'N., 75°11'W.), near the E side of Columbus Bank, is a small, scrub-covered narrow islet, low-lying on its N side, but rising to a 22m high hill on its S side.

The W side of the islet has anchorage in about 12.8m, but the area is not recommended during strong breezes because at such times a heavy swell sets around each extremity of the islet and thereafter into the anchorage.

Off-lying Islands

2.31 The several islands off the E side of Great Bahama Bank, specifically those in the seaward approaches to Exuma Sound, include Cat Island and Conception Island.

They are generally without significance to ocean vessels and are somewhat outside the areas more frequently visited by pleasure craft, yet they are unique in at least two respects.

Cat Island, in this regard, is considered to be the highest of all the islands in the Bahamas archipelago and was also thought to be the first land of the New World sighted by Christopher Columbus. San Salvador Island, the island farthest to the E of Exuma Sound, is now generally acknowledged to be the first landfall sighted by Columbus October 12, 1492.

Cat Island (24°20'N., 75°30'W.), largest of the islands fronting Exuma Sound and with a maximum elevation of 122m near its NW end, highest of all the Bahamas, is quite hilly, somewhat forested with trees of pine, cedar and mahogany, and by repute, the single most fertile island of the entire archipelago for the growing of tropical fruit.

The population numbers several thousand distributed among half a dozen or more small communities. Arthurs Town, in the N, and The Bight, in the S, are administrative centers.

Cat Island's NW extremity is radar conspicuous at 12 miles. The E side of the island, for the greater part of its length, is bold, rocky, and steep-to, though the area has not been closely examined.

The S side has several remarkable bluffs between Columbus Point, the SE extremity of the island, and Hawks Nest Point, the low and sandy SW extremity.

The W side is fronted by a broad and somewhat encumbered shoal water coastal bank which extends between Hawks Nest Point and Little San Salvador, to the N.

Small vessels with local knowledge anchor as convenient throughout the bank during calm weather and prevailing wind conditions.

2.32 Little San Salvador (Little Island) (24°34'N., 75°56'W.) is a thickly vegetated hilly islet which, rising around a large interior shoal water lagoon, is about midway along submarine ridge joining Cat Island's N extremity with Eleuthera Island's S extremity.

The passage over the ridge to the W of the islet, and thus into Exuma Sound from the N, is considerably conditioned by shoal depths and sunken dangers so that the transit in deepest water is closer to Little San Salvador than Eleuthera Island. The passage over the ridge to the E of the islet is not recommended.

West Bay, close SE of Little San Salvador extremity, has reportedly excellent anchorage for small vessels over a good holding ground of hard sand. It is sheltered from all but SW to NNW winds which send in swells.

Conception Island is the smallest and S of the islands fronting Exuma Sound. Ocean currents in their offing commonly set NW, while closer in they tend to combine with tidal currents so that resultant flow, particularly near Rum Cay, is often quite variable in set and strength.

Between the two islands, the set is commonly strong and to the NW, although a SW set may occur as well as an opposite one to the NE, especially after N winds.

2.33 Conception Island (23°50'N., 75°07'W.) is hilly, scrub-covered, and distinctive in its S extremity by reason of Wedge Point, a conspicuous white bluff. The island is uninhabited, steep-to on its W side, and fronted everywhere else by a comparatively broad margin of imperfectly charted foul ground.

Approach from the E is dangerous in that, even by day, the dark rocky heads of the foul ground are difficult to distinguish from deep water.

Conception Island's NW side has good anchorage in 11m, clear white sand, in a position about 0.3 mile offshore and with West Cay bearing due N, distant about one mile. Closer inshore, the bottom becomes foul.

The anchorage is sheltered from winds between NNE and SSE through E.

Southampton Reef, some of which uncovers, extends about 4 miles N of Conception Island. A partially submerged wreck is at its N extremity. The depths E of Southampton Reef are irregular.